

ABSTRACT

A novel data transmission method and apparatus is disclosed for communicating digital data using existing telephone wiring. According to the present invention, the digital data is represented by the time interval between two consecutive biphasic pulses. Biphasic pulses are used in the present invention because each biphasic pulse does not carry any dc component so DC component in the transmission line can be eliminated. In addition, additional data can be encoded in the amplitude or pulse width of each biphasic pulse so that higher data encoding ratio can be achieved.